SERVED: July 20, 1994

NTSB Order No. EA-4212

UNITED STATES OF AMERICA
NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

Adopted by the NATIONAL TRANSPORTATION SAFETY BOARD
at its office in Washington, D.C.
on the 6th day of July, 1994

Petition of BRODIE L. GRAY, for review of the denial by the Administrator of the Federal Aviation Administration of the issuance of an airman medical certificate.	Docket SM-4107

OPINION AND ORDER

Petitioner, acting pro se, has appealed from the oral initial decision issued by Administrative Law Judge William A. Pope, II at the conclusion of an evidentiary hearing held in this matter on March 30, 1994.[1] In that decision, the law judge upheld the FAA's denial of petitioner's application for a third-class medical certificate based on petitioner's failure to meet the medical standards set forth in 14 C.F.R. 67.17(e)(1)(iii) and

[1] Attached is an excerpt from the hearing transcript containing the oral initial decision.

(f)(2).[2] For the reasons discussed below, petitioner's appeal is denied and the initial decision is affirmed.

The FAA's final denial letter, issued to petitioner by the Federal Air Surgeon, gave the following reasons for petitioner's disqualification: 1) implantation of a pacemaker for bradycardia [slower than normal heart rate]; 2) history of atrial dysrhythmia [abnormal heart rate]; 3) ischemic response [insufficient blood flow to the heart] to treadmill exercise testing; and 4) abdominal aortic aneurysm [abnormal dilation of the aorta]. The dysrhythmia and the ischemic response to exercise were cited as manifestations of coronary heart disease. In sum, the Federal

---

[2] Sections 67.17(e)(1)(iii) and (f)(2) provide as follows:

> **§67.17 Third-class medical certificate.**
> * * *
> (e) *Cardiovascular.* (1) No established medical history or clinical diagnosis of --
> * * *
> (iii) Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant.
>
> (f) *General medical condition:*
> * * *
> (2) No other organic, functional or structural disease, defect, or limitation that the Federal Air Surgeon finds --
> (i) Makes the applicant unable to safely perform the duties or exercise the privileges of the airman certificate that he holds or for which he is applying; or
> (ii) May reasonably be expected, within two years after the finding, to make him unable to perform those duties or exercise those privileges;
>
> and the findings are based on the case history and appropriate, qualified, medical judgment relating to the condition involved.

The Administrator's denial cited similar subsections of sections 67.13 and 67.15, which set forth the medical standards for first- and second-class certification.

Air Surgeon concluded that petitioner's medical conditions were "incompatible with aviation safety." (Exhibit J-1, p. 7.)

At the hearing, petitioner joined the Administrator in submitting into evidence his FAA medical file, but offered no additional medical evidence or testimony, although it was his burden to prove that he met the relevant medical standards.[3] He did not deny having any of the cited conditions. Rather, with regard to his pacemaker, he noted that one of his doctors recommended in a letter that the FAA give "favorable consideration" to petitioner's application in light of what he (the doctor) calculated to be the negligible risk of petitioner's pacemaker failing during the relatively few hours petitioner flies per year.[4]

Petitioner testified that in the one year that he flew after implantation of the pacemaker (before the expiration of his previously-granted medical certificate), he experienced no trouble. Petitioner also offered the testimony of a pilot friend who stated that he observed no difference in petitioner's flying abilities before and after implantation of the pacemaker. Regarding his aneurysm, petitioner opined that the two percent risk of rupture -- which was referenced in a letter written by the Administrator's expert witness -- should be deemed acceptable.

---

[3] In proceedings involving certificate denials the burden of proof is on the petitioner. 49 C.F.R. 821.25.

[4] Petitioner testified that he flies approximately 12 to 15 hours per year, purely for pleasure.

The Administrator's expert witness (Dr. Milton J. Sands), a cardiologist, testified about the risks and implications of each of petitioner's medical conditions. Specifically, he testified that while petitioner's bradycardia (low heart rate) was currently being compensated for by his pacemaker, if the pacemaker were to stop working or malfunction the bradycardia and its potential risks would re-emerge. Specifically, Dr. Sands indicated that bradycardia can lead to sudden loss of consciousness; passing out; "graying out" (feeling as if one is about to pass out); or subtle changes in cognitive functioning, especially under pressure and at higher altitudes. He noted that, according to petitioner's medical records, before implantation of petitioner's pacemaker his bradycardia caused him to have congestive heart failure, evidenced by shortness of breath and fluid retention in his lungs and legs.

Moreover, he explained that the underlying bradycardia could worsen at any time, even to the point where a failure or malfunction of petitioner's pacemaker could result in death. Because of the serious risks associated with petitioner's underlying condition -- bradycardia -- Dr. Sands emphasized that the functioning of petitioner's pacemaker should be closely monitored.[5]

As for petitioner's history of atrial dysrhythmia and

[5] Dr. Sands testified that, pursuant to the generally accepted Medicare guidelines, pacemakers should be tested every three months for the first 36 months, and every two months thereafter.

ischemia, Dr. Sands testified that after implantation of the pacemaker to correct his bradycardia, petitioner developed intermittent tachycardia (a faster than normal heart rate). It was most pronounced in response to an exercise test, but a slightly elevated heart rate was also recorded at other times, even without exercise. Dr. Sands noted that petitioner did not respond well to the tachycardia. Specifically, he developed ischemia (insufficient blood flow to the heart) and his blood pressure dropped. Dr. Sands stated that petitioner's tachycardia could worsen, possibly leading to heart failure or a heart attack, and observed that this condition could compromise his ability to function during flight. He also testified that petitioner's bradycardia, tachycardia, and ischemia were very likely due to underlying coronary heart disease.

Finally, Dr. Sands addressed petitioner's aortic aneurysm. He testified that ruptured aneurysms are a major cause of sudden death. Even though petitioner's aneurysm is relatively small (3.9 centimeters), and research shows the annual risk of rupture at its current size to be only two percent, Dr. Sands cautioned that the aneurysm could expand unpredictably, and that the risk of rupture goes up dramatically as the aneurysm increases in size. Indeed, he testified that 80 percent of such aneurysms do expand, and that the expansion could be rapid. Because of the extreme pain associated with expansion prior to rupture and the obvious safety implications of rupture, Dr. Sands classified this condition as a high risk to aviation safety. In his opinion, the

aneurysm alone, even without petitioner's other medical conditions, was disqualifying for any type of medical certification.

With respect to the specific regulations under which petitioner was found disqualified, Dr. Sands testified that petitioner's medical records revealed an established medical history of coronary heart disease which was clinically significant (disqualifying under section 67.17(e)(1)(iii)); and that he had an organic, functional, or structural disease, defect or limitation which would make him unable to safely perform the duties or exercise the privileges of an airman's certificate (disqualifying under section 67.17(f)(2)). In sum, Dr. Sands concluded that the combination of petitioner's multiple medical conditions presented an unacceptable risk to aviation safety, and rendered him an unsuitable candidate for unrestricted medical certification.[6]

In his initial decision, the law judge relied on the medical

[6] Dr. Sands noted that if petitioner did not have the aortic aneurysm, and if his remaining conditions were monitored and kept under control, he would recommend that the FAA find him medically qualified, but only for a *restricted* certificate, known as a special issuance. The continued validity of such a certificate is generally conditioned on favorable results of regular medical monitoring and testing, or is otherwise limited. See 14 C.F.R. 67.19. The decision whether or not to issue a restricted certificate to an applicant who does not meet the medical standards set forth in 14 C.F.R. Part 67 is discretionary with the Administrator, and is not reviewable by the Board. Petition of Doe, 5 NTSB 41, 43 (1985) (Board's authority extends only to ordering the issuance of unrestricted airman medical certificates); Administrator v. Martin, 4 NTSB 1666, 1667 (1984) (Board does not have discretion to exempt applicants from a regulation that makes a disorder disqualifying).

findings and conclusions given by Dr. Sands, noting that petitioner had offered no evidence in rebuttal. The law judge accepted as reasonable Dr. Sands' conclusion that the cumulative effect of petitioner's medical problems -- especially the unpredictable nature of the aneurysm[7] -- was too high. The law judge found that petitioner had not met his burden of proving medical qualification, and held that "[petitioner's] medical conditions place him at risk of sudden catastrophic incapacitating events of greater proportions then [sic] is acceptable for aviation safety," and that he did not meet the medical standards set forth in sections 67.17(e)(1)(iii) and (f)(2). (Tr. 101-02.)

On appeal, petitioner maintains that his pacemaker does not represent an unacceptable risk, noting Dr. Sands' agreement that -- given the nature of his underlying bradycardia at the present time -- petitioner would not experience noticeable effects of pacemaker failure for at least several hours. However, petitioner ignores the remainder of Dr. Sands' testimony, which made clear that petitioner's underlying bradycardia could worsen to the point where loss of consciousness or death would result from a pacemaker failure or malfunction. Moreover, petitioner's assertion that the chances of pacemaker failure are "negligible" is unsupported in the record. Indeed, we think the Medicare

[7] The law judge cited our decision in Petition of Shore, 3 NTSB 1631 (1979), where a dissecting aneurysm of the aorta was found to be disqualifying due to what we found to be the unacceptable risk of sudden incapacitation.

guidelines specifying that pacemakers should be tested every three months, and then (after 36 months) every two months, suggest to the contrary. Finally, we can attach no weight to petitioner's unsupported assertion that he was told a pacemaker would improve his chances of gaining medical certification.

Petitioner also asserts as support for his recertification that: the doctor who administered the testing requested by the FAA recommended that the FAA recertify him; Dr. Sands indicated petitioner's coronary heart disease was "non-critical"; the size of his aneurysm has not increased in approximately a year; and the Experimental Aircraft Association has petitioned the FAA to allow some pilots to self-certify themselves for medical certification and to extend the interval for third-class recertification from two years to four years. However, none of these points justify reversal or modification of the initial decision.

The FAA was not required to accept the opinion of the doctor who recommended recertification. Moreover, there is no indication that he was recommending issuance of an unrestricted certificate, the only type of certificate we are empowered to review.[8] Further, Dr. Sands explained that in characterizing petitioner's heart disease as "non-critical" he meant only to indicate that immediate treatment of that disease did not appear to be necessary -- he did not mean to imply that the disease was not clinically significant. The fact that petitioner's aneurysm

[8] See footnote 6.

has not increased in size does not lessen the future risks of that aneurysm. As Dr. Sands made clear in his testimony, expansion leading to rupture can be rapid and unpredictable. Finally, a petition to change the procedures for medical certification (which has not been accepted by the FAA) clearly has no impact on our review of petitioner's medical condition under the existing standards.

ACCORDINGLY, IT IS ORDERED THAT:

1. Petitioner's appeal is denied;

2. The initial decision is affirmed; and

3. The denial of petitioner's application for medical certification is affirmed.

HALL, Acting Chairman, LAUBER, HAMMERSCHMIDT and VOGT, Members of the Board, concurred in the above opinion and order.